REMARKS

Claims 1-29 are pending in the present application. Claims 1-29 have been rejected. In the above amendments, claim 5 has been amended to obviate the Section 112 Rejections, pointed out below.

Applicant respectfully responds to this Office Action.

A. Claims 5-8 Rejected Under 35 U.S.C. § 112

The Examiner rejected claims 5-8 under 35 U.S.C. § 112, second paragraph. Claim 5 has been amended to obviate the Section 112 Rejections.

B. Claims 1, 2, 5, 6, 9, 11-15, 17-21 and 23-26 Rejected Under 35 U.S.C. § 102(b)

The Examiner rejected claims 1, 2, 5, 6, 9, 11-15, 17-21 and 23-26 under 35 U.S.C. § 102(b) based on U.S. Patent No. 5,577,168 to Hass et al. (hereinafter, "Hass").

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (Aug. 2001) (quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the . . . claim." Id. (quoting Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). In addition, "the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Claim 1 recites a method that includes the step of "transmitting from the second infrastructure element associated with the packet data services node a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections, wherein the dormant network connections are connections that are not being used to transmit traffic channel data." The prior art cited does not teach or suggest these claim limitations.

The Examiner has asserted that Haas discloses "a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." Office Action, page 3.

Haas states the following:

> Using the ID numbers transmitted on the beacon each base station 10 maintains a database list of the mobiles 14 in its coverage area--called active mobiles. In addition, each base station 10 maintains in its database a list of all the active mobiles 14 in the neighboring cells 6 which are locally referred to as non-active mobiles. This information is made available by periodic dissemination of the list of active mobiles 14 in each base station 10 coverage area to its adjacent cells 6 through the terrestrial network 16. In addition to the list of the ID numbers of the active mobiles 14 in the coverage area of a base station 10 this information exchange also includes the address of the destinations of the connections (if such exist) of the active mobiles 14 in the coverage area of the base station and the transmission channel numbers associated with the active mobiles.

Haas, Col. 3, lines 50-64. As shown, Haas states that "the list of active mobiles 14 in each base station 10 coverage area" is periodically disseminated "to its adjacent cells 6 through the terrestrial network 16." Id. The dissemination also includes "the address of the destinations of the connections (if such exist) of the active mobiles 14 in the coverage area of the base station and the transmission channel numbers associated with the active mobiles." Id. This is not "a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As set forth in the Haas reference, the dormant connections of Haas are not set up until after the dissemination or until after the mobile has left a coverage area, as shown by the following:

> In operation, ***when a base station 10 receives an ID number and a call destination number*** of a mobile 14 from a neighbor cell 6 (in which the mobile is active) ***it sets-up a dormant connection to the call destination terminal.*** Thus, when the mobile 14 moves into the coverage area of the base station 10 (i.e. when the base station receives the mobile's beacon ID) it updates the status of the mobile 14 to active and assigns a channel to that mobile--the association between the mobile and the base station 10 has been created. A mobile 14 may be associated with more than one base station 10 at the same time (e.g. when located in the overlap area 12). The hand-off mechanism is fully transparent to the mobile 14 which may not know what base station 10 it is associated with.
>
> When a base station 10 fails to receive a beacon from an active mobile 14 for a period of "time-out", ***the base station 10 determines that the mobile 14 has left***

> *its coverage area. The ID number of the mobile 14 is then made non-active* in the database *and the connection to the mobile destination is also made dormant.*

Id., Col. 4, lines 5-24 (emphasis added).

Thus Haas does not disclose "a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." At most Haas appears to disclose transmitting from a base station a list of active mobiles, the address of the destinations of the connections of the active mobiles, and the transmission channel numbers associated with the active mobiles. Id., Cols. 3 and 4. These items transmitted in Haas do not include "a number of dormant network connections associated with the mobile station." The "dormant connection" of Haas is not set up until the base station receives the transmission. Id., Col. 4, lines 5-8. As a result, the transmission involved in Haas cannot also include the dormant network connection because it is not yet set up.

Because the transmission of Haas does not include "a message including a number of dormant network connections associated with the mobile station", as shown, it also cannot disclose the transmission including "a reduced list of identifiers associated with the dormant network connections" because the "dormant connections" of Haas are not set up until after this transmission.

As set forth above, the Haas reference does not disclose every element of claim 1. Claim 2 depends directly from claim 1. Thus, Applicants respectfully request that the rejection of claim 2 be withdrawn for at least the same reasons.

Claim 5 recites a method that includes the step of "transmitting from the mobile station a message including a number of dormant network connections associated with the mobile station and enhanced information associated with the dormant network connections." The prior art cited does not teach or suggest these claim limitations. As shown above, Haas does not disclose "a message including a number of dormant network connections associated with the mobile station." Because the transmission of Haas does not include "a message including a number of dormant network connections associated with the mobile station", as shown, it also cannot disclose its transmission including "enhanced information associated with the dormant network connections" because the "dormant connections" of Haas are not set up until after this transmission.

Haas further does not disclose "***transmitting from the mobile station*** a message including a number of dormant network connections associated with the mobile station and enhanced information associated with the dormant network connections" (emphasis added). The transmission of Haas is made from the base station of the cell. See Id. Col. 3, lines 50-64 and Col. 4, lines 5-24, quoted above.

As set forth above, the Haas reference does not disclose every element of claim 5. Claim 6 depends directly from claim 5. Thus, Applicants respectfully request that the rejection of claim 6 be withdrawn for at least the same reasons.

Claim 9 recites a "mobile station configured to inform a packet data services network of dormant network connections associated with the mobile station" that includes the element of "a set of instructions executable by the processor to modulate and transmit from the mobile station a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As shown above, the prior art cited does not disclose, teach or suggest these claim limitations.

Claims 11-14 depend directly or indirectly from claim 9. Thus, Applicants respectfully request that the rejection of claims 11-14 be withdrawn for at least the same reasons.

Claim 15 recites a "mobile station configured to inform a packet data services network of dormant network connections associated with the mobile station" that includes the element of "a device configured to transmit from the mobile station a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As shown above, the prior art cited does not teach or suggest these claim limitations.

Claims 17-20 depend directly or indirectly from claim 15. Thus, Applicants respectfully request that the rejection of claims 17-20 be withdrawn for at least the same reasons.

Claim 21 recites a "mobile station configured to inform a packet data services network of dormant network connections associated with the mobile station" that includes the element of "means for transmitting from the mobile station a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As shown above, the prior art cited does not teach or suggest these claim limitations.

Claims 23-26 depend directly or indirectly from claim 21. Thus, Applicants respectfully request that the rejection of claims 23-26 be withdrawn for at least the same reasons.

C. Claims 3, 4, 7, 8, 10, 16, 22 and 27-29 Rejected Under 35 U.S.C. § 103(a)

The Examiner rejected claims 3, 4, 7, 8, 10, 16, 22 and 27-29 under 35 U.S.C. § 103(a) as being unpatentable over Haas in view of Chuah et al., U.S. Patent No. 6,496,491 (hereinafter, "Chuah"). This rejection is respectfully traversed.

The M.P.E.P. states that

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.
>
> The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

M.P.E.P. § 2142. A prima facie case of obviousness has not been established regarding claims 3, 4, 7, 8, 10, 16, 22 and 27-29 because the prior art cited does not teach or suggest all the claim limitations.

Claim 3 recites a "method of simplifying Packet Control Function network element functionality" that includes the element of "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers." The prior art cited does not teach or suggest these claim limitations.

Haas does not teach or suggest "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers." As shown above, Haas may teach or suggest a base station maintaining a list of active mobiles, the

address of the destinations of the connections of the active mobiles, and the transmission channel numbers associated with the active mobiles. Haas, Cols. 3 and 4. This list of Haas may or may not be in the form of a table. At most Haas teaches or suggests a table that includes a list of active mobiles, the address of the destinations of the connections of the active mobiles, and the transmission channel numbers associated with the active mobiles. However, this is not "a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers."

Chuah also does not teach or suggest the element of "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers." Column 14, lines 35-41 of Chuah are cited in the last Office Action as teaching a PPP connection table. See Office Action, Page 5. This part of Chuah refers to a "connection table similar to that shown in Table Four." Chuah, Col. 14, lines 37-38. The connection table of Table 4 in Chuah is "for each direction of communication for each established VPN session with a remote user." Chuah, Col. 6, lines 8-10. Chuah further states the following regarding Table 4:

> Anchor LAC associates with each VPN session a connection number. In addition, this connection number is mapped to the respective user. This table lists, by connection number, the Serving LAC IP Address, with associated tunnel ID and Call ID values for that hop, and the associated LNS IP Address, with associated tunnel ID and Call ID values for that associated hop.

Id. at lines 20-26. Chuah discloses a VPN connection table. Chuah's VPN connection table is not a "reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers." Thus, Chuah does not teach or suggest "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers."

The above has shown that neither Haas or Chuah teach or suggest the step of Claim 3 of "maintaining a reduced entry PPP connection table that includes radio access network (RAN) PDSN interface (RPI) communication pipe identifiers." Thus, Applicants respectfully request that the rejection of claim 3 be withdrawn.

Claim 4 depends directly from claim 3. Thus, Applicants respectfully request that the rejection of claim 4 be withdrawn for at least the same reasons.

Claims 7-8 depend either directly or indirectly from claim 5. Claim 5 recites a method that includes the step of "transmitting from the mobile station a message including a number of dormant network connections associated with the mobile station and enhanced information associated with the dormant network connections." As discussed above, Haas does not teach or suggest these limitations. As a result, a prima facie case of obviousness has not been established regarding claims 7-8 because the cited prior art does not teach or suggest all the claim limitations. Accordingly, Applicants respectfully request that the rejection of claims 7-8 be withdrawn.

Claim 10 depends either directly or indirectly from claim 9. Claim 9 recites a "mobile station configured to inform a packet data services network of dormant network connections associated with the mobile station" that includes the element of "a set of instructions executable by the processor to modulate and transmit from the mobile station a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As shown above, the prior art cited does not teach or suggest these claim limitations. As a result, a prima facie case of obviousness has not been established regarding claim 10 because the cited prior art does not teach or suggest all the claim limitations. Accordingly, Applicants respectfully request that the rejection of claim 10 be withdrawn.

Claim 16 depends either directly or indirectly from claim 15. Claim 15 recites a "mobile station configured to inform a packet data services network of dormant network connections associated with the mobile station" that includes the element of "a device configured to transmit from the mobile station a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As shown above, the prior art cited does not teach or suggest these claim limitations. As a result, a prima facie case of obviousness has not been established regarding claim 16 because the cited prior art does not teach or suggest all the claim limitations. Accordingly, Applicants respectfully request that the rejection of claim 16 be withdrawn.

Claim 22 depends either directly or indirectly from claim 21. Claim 21 recites a "mobile station configured to inform a packet data services network of dormant network connections associated with the mobile station" that includes the element of "means for transmitting from the

mobile station a message including a number of dormant network connections associated with the mobile station and a reduced list of identifiers associated with the dormant network connections." As shown above, the prior art cited does not teach or suggest these claim limitations. As a result, a prima facie case of obviousness has not been established regarding claim 22 because the cited prior art does not teach or suggest all the claim limitations. Accordingly, Applicants respectfully request that the rejection of claim 22 be withdrawn.

Claim 27 recites a "packet data services node" that "is configured to maintain Point to Point Protocol connection tables of dormant network connections associated with a mobile station." Claim 27 further requires "a radio-access-network-PDSN channel interface," "a processor coupled to the radio-access-network-PDSN channel interface," and "a processor-readable medium accessible by the processor and containing a set of instructions executable by the processor to update the dormant network connection information associated with the mobile station." As shown above, the prior art cited does not teach or suggest these claim limitations. Thus, Applicants respectfully request that the rejection of claim 27 be withdrawn.

Claims 28-29 depend either directly or indirectly from claim 27. As discussed above, the prior art does not teach or suggest all of the claim limitations of claim 27. As a result, a prima facie case of obviousness has not been established regarding claims 28-29 because the cited prior art does not teach or suggest all the claim limitations. Accordingly, Applicants respectfully request that the rejection of claims 28-29 be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: July 16, 2004

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